

SEQUENCE LISTING

<110> IMMUCON INC.
SULLIVAN, Robert
BÉRUBÉ, Bruno
LÉGARÉ, Christine
GAUDREAULT, Christian

<120> ACROSMAL SPERM PROTEIN AND USES THEREOF

<130> 13045-2PCT FC/1d

<150> US09/090,567
<151> 1998-06-06

<160> 7

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 1081
<212> DNA
<213> Artificial Sequence

<220>
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<222> (124) ... (856)
<223> p26h cDNA

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agc	atg	aag	ctg	aat	ttc	act	ggt	ctc	agg	gtt	acc	ggg	gca	168	
Met	Lys	Leu	Asn	Phe	Thr	Gly	Leu	Arg	Ala	Leu	Val	Thr	Gly	Ala	
1		5					10					15			

ggg	aga	ggg	att	ggg	cga	ggc	act	gcg	aaa	gcc	ctg	cat	gcc	tca	gga	216
Gly	Arg	Gly	Ile	Gly	Arg	Gly	Thr	Ala	Lys	Ala	Leu	His	Ala	Ser	Gly	
20		25										30				

gcc	aaa	gtg	gtg	gcc	gtg	tca	ctc	atc	aac	gaa	gac	ctg	gtc	agc	ctg	264
Ala	Lys	Val	Val	Ala	Val	Ser	Leu	Ile	Asn	Glu	Asp	Leu	Val	Ser	Leu	
35				40								45				

gcc	aaa	gag	tgt	ccg	ggc	ata	gag	cct	gtg	tgt	gtg	gac	ctg	ggt	gac	312
Ala	Lys	Glu	Cys	Pro	Gly	Ile	Glu	Pro	Val	Cys	Val	Asp	Leu	Gly	Asp	
50		55										60				

tgg	gag	gcc	aca	gag	aag	gca	ctg	ggc	cgt	att	ggc	ccc	gtg	gac	ctg	360
Trp	Glu	Ala	Thr	Glu	Lys	Ala	Leu	Gly	Arg	Ile	Gly	Pro	Val	Asp	Leu	
65				70								75				

ctg	gtg	aac	aat	gcg	gcs	gtg	gcg	cta	gtg	cag	cct	ttc	ata	cag	tct	408
Leu	Val	Asn	Asn	Ala	Ala	Val	Ala	Leu	Val	Gln	Pro	Phe	Ile	Cln	Ser	
80				85						90			95			

acc aag gag gtc ttt gac agg tcc ttc aat gtg aat gtg cgc tct gtg	456
Thr Lys Glu Val Phe Asp Arg Ser Phe Asn Val Asn Val Arg Ser Val	
100	105
110	
ctg caa gtg tcc cag atg gta gcc aag ggc atg att aac cgt gga gtg	504
Leu Gln Val Ser Gln Met Val Ala Lys Gly Met Ile Asn Arg Gly Val	
115	120
125	
gca gga tcc att gtc aac atc tcc agc atg gtg gcc tat gtc acc ttc	552
Ala Gly Ser Ile Val Asn Ile Ser Ser Met Val Ala Tyr Val Thr Phe	
130	135
140	
cct ggt ctg gcc acg tac agc tcc acc aag ggt gct ata acc atg ctg	600
Pro Gly Leu Ala Thr Tyr Ser Ser Thr Lys Gly Ala Ile Thr Met Leu	
145	150
155	
acc aaa gcc atg gcc atg gag ctg gga cca tac aag atc cgg gtg aac	648
Thr Lys Ala Met Ala Met Glu Leu Gly Pro Tyr Lys Ile Arg Val Asn	
160	165
170	175
tct gta aac cct acc gtg gtg ctg act gac atg ggc aag aaa gtc tct	696
Ser Val Asn Pro Thr Val Val Leu Thr Asp Met Gly Lys Lys Val Ser	
180	185
190	
gca gac ccg gaa ttt gcc aag aag ctc aag gag cgc cac cca ctg agg	744
Ala Asp Pro Glu Phe Ala Lys Lys Leu Lys Glu Arg His Pro Leu Arg	
195	200
205	
aag ttc gca gag gtg gag gac gtg gtc aac agc atc ctc ttc ctg ctc	792
Lys Phe Ala Glu Val Glu Asp Val Val Asn Ser Ile Leu Phe Leu Leu	
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220	
agc gac agc agc gcc tct acc agc ggc tct ggc atc ctg gtg gac gct	840
Ser Asp Ser Ser Ala Ser Thr Ser Gly Ser Gly Ile Leu Val Asp Ala	
225	230
235	
ggt tac ctg gcc tcc t agacggccca ggtgcagggg actcctggag acttccctgg	896
Gly Tyr Leu Ala Ser	
240	
cctcaccctt acatcaagac cccgccttca acccaaccca ataattttgt tcgaatctg	956
tagagcccca ccccacacac atccatcccc aacttttagac tccggatcc cgccattcca	1016
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Lys Val Val Ala Val Ser Leu Ile Asn Glu Asp Leu Val Ser Leu Ala	
35	40
45	

Lys Glu Cys Pro Gly Ile Glu Pro Val Cys Val Asp Leu Gly Asp Trp
 50 55 60
 Glu Ala Thr Glu Lys Ala Leu Gly Arg Ile Gly Pro Val Asp Leu Leu
 65 70 75 80
 Val Asn Asn Ala Ala Val Ala Leu Val Gln Pro Phe Ile Gln Ser Thr
 85 90 95
 Lys Glu Val Phe Asp Arg Ser Phe Asn Val Asn Val Arg Ser Val Leu
 100 105 110
 Gln Val Ser Gln Met Val Ala Lys Gly Met Ile Asn Arg Gly Val Ala
 115 120 125
 Gly Ser Ile Val Asn Ile Ser Ser Met Val Ala Tyr Val Thr Phe Pro
 130 135 140
 Gly Leu Ala Thr Tyr Ser Ser Thr Lys Gly Ala Ile Thr Met Leu Thr
 145 150 155 160
 Lys Ala Met Ala Met Glu Leu Gly Pro Tyr Lys Ile Arg Val Asn Ser
 165 170 175
 Val Asn Pro Thr Val Val Leu Thr Asp Met Gly Lys Lys Val Ser Ala
 180 185 190
 Asp Pro Glu Phe Ala Lys Lys Leu Lys Glu Arg His Pro Leu Arg Lys
 195 200 205
 Phe Ala Glu Val Glu Asp Val Val Asn Ser Ile Leu Phe Leu Leu Ser
 210 215 220
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 Tyr Leu Ala Ser

<210> 3
 <211> 912
 <212> DNA
 <213> Artificial Sequence

<220>
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accggggcag gcaaaggat	ataggcgccgc	acggtccagg	cgctgcacgc	gacgggcgcgc	180
cggggtgggg	ctgtgagccg	gactcaggcg	gccttgaca	gccttgcgc	240
gggatagaac ccgtgtgcgt	ggacctgggt	gactgggagg	ccaccgagcg	ggcgctgggc	300
agcgtggggcc	ccgtggacct	gctggtaac	aacgcgcgtg	tcgcctgtct	360
ctggagggtca	ccaaaggaggc	ctttgacaga	tcctttgagg	tgaacctgcg	420
caggtgtcgc	agattgtggc	cagggctta	atagcccccgg	tgcggtcata	480
aatgtctcca	gccagtgtc	ccagcgggca	gtaactaacc	atagcgtcta	540
aagggtggcc	tggacatgt	gaccaagg	atggccctag	tcgtccacc	600
cgagtgaatg	cagtaaaaccc	cacagtgg	atgacgtcca	ccacaagatc	660
gaccccccaca	aggccaagac	tatgctgaac	cgaatccac	tggccagg	720
gagcacgtgg	tgaacgcat	cctttctg	ctgagtgacc	gaaatggcat	780
tccactttgc	cggtggaaag	ggcttctgg	gcctgtgag	gaccacgggt	840
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 <212> PRT
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<220>
<223> P34 antigenic fragment

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Met Glu Leu Phe Leu Ala Gly Arg Arg Val Leu
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<211> 11
<212> PRT
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Cys His Lys Ala Lys Thr Met Leu Asn Arg Ile
1 5 10

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<211> 21
<212> DNA
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<223> cDNA for use as primer

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21

<210> 7
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21

09/719053

JC01 Rec'd PCT/PTO 07 DEC 2000

SEQUENCE LISTING

<110> Robert Sullivan et al.

<120> ACROSOMAL SPERM PROTEIN AND USES THEREOF

<130> 13045-2US-1 FC/JM

<150> US09/090,567

<151> 1998-06-08

<150> PCT/CA99/00437

<151> 1998-05-13

<160> 7

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 1081

<212> DNA

<213> Artificial Sequence

<220>

<221> CDS

<222> (124) ... (856)

<223> p26h cDNA

<400> 1

gtccctggag	gttggctgta	ggattcaggt	ggcttgctca	ggctgggatc	aaggacacag	60
tgagcagatc	aaccttaacc	tcagcccctc	ccctcgccac	aggaggacac	ttggtgtcagc	120
atg	aat	ttc	act	gtt	ctc	168
Met	Lys	Asn	Phe	Thr	Gly	
1	5	10	15			

ggg	aga	ggg	att	ggg	cga	ggc	act	gct	aaa	gcc	ctg	cat	gcc	tca	gga	216
Gly	Arg	Gly	Ile	Gly	Arg	Gly	Thr	Ala	Lys	Ala	Leu	His	Ala	Ser	Gly	
20			25					30								

gcc	aaa	gtg	gtg	gcc	gtg	tca	ctc	atc	aac	gaa	gac	ctg	gtc	agc	ctg	264
Ala	Lys	Val	Val	Ala	Val	Ser	Leu	Ile	Asn	Glu	Asp	Leu	Val	Ser	Leu	
35			40					45								

gcc	aaa	gag	tgt	ccg	ggc	ata	gag	cct	gtg	tgt	gtg	gac	ctg	ggt	gac	312
Ala	Lys	Glu	Cys	Pro	Gly	Ile	Glu	Pro	Val	Cys	Val	Asp	Leu	Gly	Asp	
50		55						60								

tgg	gag	gcc	aca	gag	aag	gca	ctg	ggc	cgt	att	ggc	ccc	gtg	gac	ctg	360
Trp	Glu	Ala	Thr	Glu	Lys	Ala	Leu	Gly	Arg	Ile	Gly	Pro	Val	Asp	Leu	
65			70					75								

ctg	gtg	aac	aat	gct	gct	gct	gct	cgt	cgt	att	ggc	ccc	gtg	gac	ctg	408
Leu	Val	Asn	Asn	Ala	Ala	Val	Ala	Leu	Val	Gln	Pro	Phe	Ile	Gln	Ser	
80		85						90					95			

acc aag gag gtc ttt gac agg tcc ttc aat gtg aat gtg cgc tct gtg	456
Thr Lys Glu Val Phe Asp Arg Ser Phe Asn Val Asn Val Arg Ser Val	
100 105 110	
ctg caa gtg tcc cag atg gta gcc aag ggc atg att aac cgt gga gtg	504
Leu Gln Val Ser Gln Met Val Ala Lys Gly Met Ile Asn Arg Gly Val	
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gca gga tcc att gtc aac atc tcc agc atg gtg gcc tat gtc acc ttc	552
Ala Gly Ser Ile Val Asn Ile Ser Ser Met Val Ala Tyr Val Thr Phe	
130 135 140	
cct ggt ctg gcc acg tac agc tcc acc aag ggt gct ata acc atg ctg	600
Pro Gly Leu Ala Thr Tyr Ser Ser Thr Lys Gly Ala Ile Thr Met Leu	
145 150 155	
acc aaa gcc atg gcc atg gag ctg gga cca tac aag atc cgg gtg aac	648
Thr Lys Ala Met Ala Met Glu Leu Gly Pro Tyr Lys Ile Arg Val Asn	
160 165 170 175	
tct gta aac cct acc gtg gtg ctg act gac atg ggc aag aaa gtc tct	696
Ser Val Asn Pro Thr Val Val Leu Thr Asp Met Gly Lys Lys Val Ser	
180 185 190	
gca gac ccg gaa ttt gcc aag aag ctc aag gag cgc cac cca ctg agg	744
Ala Asp Pro Glu Phe Ala Lys Lys Leu Lys Glu Arg His Pro Leu Arg	
195 200 205	
aag ttc gca gag gtg gag gac gtg gtc aac agc atc ctc ttc ctg ctc	792
Lys Phe Ala Glu Val Glu Asp Val Val Asn Ser Ile Leu Phe Leu Leu	
210 215 220	
agc gac agc agc gcc tct acc agc ggc tct ggc atc ctg gtg gac gct	840
Ser Asp Ser Ser Ala Ser Thr Ser Gly Ser Gly Ile Leu Val Asp Ala	
225 230 235	
ggt tac ctg gcc tcc t agacggccca ggtgcagggg actcctggag acttccctgg	896
Gly Tyr Leu Ala Ser	
240	
cctcacccctt acatcaagac cccgccttca acccaacccca ataattttgt tcgaatcctg	956
tagagcccca cccccacacac atccatcccc aacttttagac tccggatcc cgccatcca	1016
taccagctat gctgagataa ttgattaaa taagtatccc aaaccacaaa aaaaaaaaaaa	1076
aaaaaa	1081
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Met Lys Leu Asn Phe Thr Gly Leu Arg Ala Leu Val Thr Gly Ala Gly	
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 Lys Glu Cys Pro Gly Ile Glu Pro Val Cys Val Asp Leu Gly Asp Trp
 50 55 60
 Glu Ala Thr Glu Lys Ala Leu Gly Arg Ile Gly Pro Val Asp Leu Leu
 65 70 75 80
 Val Asn Asn Ala Ala Val Ala Leu Val Gln Pro Phe Ile Gln Ser Thr
 85 90 95
 Lys Glu Val Phe Asp Arg Ser Phe Asn Val Asn Val Arg Ser Val Leu
 100 105 110
 Gln Val Ser Gln Met Val Ala Lys Gly Met Ile Asn Arg Gly Val Ala
 115 120 125
 Gly Ser Ile Val Asn Ile Ser Ser Met Val Ala Tyr Val Thr Phe Pro
 130 135 140
 Gly Leu Ala Thr Tyr Ser Ser Thr Lys Gly Ala Ile Thr Met Leu Thr
 145 150 155 160
 Lys Ala Met Ala Met Glu Leu Gly Pro Tyr Lys Ile Arg Val Asn Ser
 165 170 175
 Val Asn Pro Thr Val Val Leu Thr Asp Met Gly Lys Lys Val Ser Ala
 180 185 190
 Asp Pro Glu Phe Ala Lys Lys Leu Lys Glu Arg His Pro Leu Arg Lys
 195 200 205
 Phe Ala Glu Val Glu Asp Val Val Asn Ser Ile Leu Phe Leu Leu Ser
 210 215 220
 Asp Ser Ser Ala Ser Thr Ser Gly Ser Gly Ile Leu Val Asp Ala Gly
 225 230 235 240
 Tyr Leu Ala Ser

<210> 3
 <211> 912
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> P34 cDNA

<400> 3

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aaaaaaaaaa aa					912

<210> 4

<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> P34 antigenic fragment

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Met Glu Leu Phe Leu Ala Gly Arg Arg Val Leu
1 5 10

<210> 5
<211> 11
<212> PRT
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<400> 5
Cys His Lys Ala Lys Thr Met Leu Asn Arg Ile
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<210> 6
<211> 21
<212> DNA
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<220>
<223> cDNA for use as primer

<400> 6
gtgacagggg cagggaaagg g 21

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